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ABSTRACT

This report describes the goals, objectives, activities, and outcomes of a project developed at the University of New Mexico Children's Psychiatric Hospital's Mimbres School to demonstrate the use of the microcomputer as a tool for establishing positive communication between emotionally-disturbed children and their parents. The project was designed to involve the parents as active participants in the computer learning experiences of the children, who ranged in age from 4 to 14. It was found that participation with teachers, child care workers, clinicians, and parents in teaching/learning teams facilitated the development of self-worth among the emotionally-disturbed children. The report concludes with a description of requirements for replicating the project, highlighting the need for a full-time teacher coordinator. Included in the appendixes are demographic data on the hospital; a sample project teacher resume; a project time line; inservice staff workshop schedules; and examples of items purchased with grant funds, assessment tools, and written communications from the project. (GL)

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UNIVERSITY OF NEW MEXICO CHILDREN'S PSYCHIATRIC HOSPITAL

MIMBRES SCHOOL

TITLE VI
EXCELLENCE IN EDUCATION GRANTS COMPETITION
ERI-G-86-0021

Teaching Teams to Enhance Microcomputer Communications Between School and Family

1986-1988

Final Report

Submitted by

Virginia A. Cavalluzzo, PhD
Principal/Superintendent

IR014444

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INTRODUCTION

The development of the microcomputer, its availability and the relative ease with which this technology can be used is rapidly changing our everyday lives. Computer technology is being applied to more and more everyday tasks. Whether in the super market, the bank, the auto mechanic shop or with appliances in our homes, everyone is encountering computer technology at work.

Learning this technology and effectively applying it to daily life activities is essential to adults and children alike in our society. The increased application of this technology into everyday life is influencing significantly the nature of communication among people in work and home environments. On the job training is occurring for many adults enabling them to become computer literate in one or more applications to meet their specific job needs. School curricula also is changing to incorporate the teaching the skills and application of this technology to students at all grade levels.

Computer training was incorporated into the Mimbres School curricula seven years ago. Each classroom has its own computer, printer and a variety of other peripherals which are in constant use. It has become a powerful teaching and learning tool. As a result, children have learned new skills and have gained a level of proficiency with this technology which exceeds that of their parents. Thus, the technology is influencing some aspects of communication among parents and their children.

In the case of seriously emotionally disturbed children and their families, the discrepancy between the parents' and the child's knowledge of the skills with computer technology often creates an additional source of disharmony within the family relationships. Thus diverting the family's attention from more significant issues which must be addressed in their treatment program.

Seeking a solution to this problem, a special teaching/learning project, TEACHING TEAMS TO ENHANCE MICROCOMPUTER COMMUNICATIONS BETWEEN SCHOOL AND FAMILY, was created.

The project was developed to demonstrate how the microcomputer would be used as an instructional tool to reduce, between the parent and the child, the discrepancy in their knowledge and use of computers. The project was designed to involve the child in teaching his/her parents how to use the computer. Through this process the child and his/her parents would establish positive communications regarding this technology.

Using the computer technology, the teachers, child care workers, clinicians, and parents would work together in teaching/learning teams in which the children would become the teachers and the adults would become the students. In this way, the microcomputer would become a positive and powerful tool in supporting the ongoing process of developing positive communication between the children and their parents.

DEMOGRAPHICS

The University of New Mexico Children's Psychiatric Hospital (CPH) is a 53 bed acute and intermediate care inpatient facility for children between the ages of 4 and 14. The hospital serves children from throughout the state of New Mexico including children from the Indian nations which are located within the state. The CPH patient population reflects the same proportion to the diverse rural, urban, economic, ethnic and cultural characteristics as found in the general population of the state.

PLAN OF OPERATION

The original proposal was designed as a two year project. In the first year the teaching/learning team activities were to be developed and implemented within the CPH Mimbres School. In the second year, an outreach component would be added to enhance the child's transition from the Mimbres School to his/her home school. Due to funding limitations, the project was awarded with reduced funding for the first phase only. Grant funds were used to purchase Two additional Apple computers, upgrading components for all other Apple computers already in use in the classrooms, some peripheral equipment, some new software programs and the salary for the part-time project teacher.

In the time lapse between when the grant application was submitted and notification that the award was being granted, numerous personnel changes occurred among the Mimbres school staff. The Mimbres school teacher originally scheduled to be the project teacher/coordinator of the grant was involved in another project and was no longer available serve as the microcomputer project teacher/coordinator. An intensive local recruitment effort was

made to find someone with teaching, computing, and managerial skills who could fill the position of teacher/coordinator of this project. After several months of unsuccessful recruitment, the position was redefined. The position was changed to a part-time project teacher. Positive response was received from the local newspaper advertising of the project teacher position. A project teacher, with excellent skills in teaching, computing, and interpersonal relationships was employed, finally, five months after the project was awarded. This person was a full-time teacher with the Albuquerque Public Schools. She was employed to be the CPH Mimbres School project teacher. She worked in this capacity in the late afternoons, evenings, and Saturdays. The changing of this position from a project coordinator to a project teacher as well as from a full-time to a part-time position required further reorganization to be made. The primary administrative and managerial tasks of the project were assumed by the Mimbres School principal. The part-time project teacher was assisted with the coordination of the day to day tasks of the project by the Mimbres School teacher/curriculum coordinator. The teacher/curriculum coordinator also served as a liaison between the project teacher and all others involved in the project. The Mimbres School principal provided the overall leadership and management for integrating the project into the school's overall program.

The project goal was to develop positive communication between the child and his/her parents by involving them, as joint active participants, in the children's computer learning experiences. This goal was in concert with the 1986-1987 Mimbres School curriculum improvement plan which, in part, was:

> To enhance curricular activities and learning through the use of microcomputer technology;
>
> To enhance learning experiences that are therapeutically supportive to each child's self-esteem; and
>
> To strengthen the education, milieu, and clinical team members' skills in implementing a therapeutic educational program.

GOAL, OBJECTIVES, AND ACTIVITIES: PHASE I

Goal: To use the computer as a tool to develop positive communication between the child and his/her parents by making them active participants in a shared learning experience.

Objectives: To prepare each child participating in the project to share a mutually enjoyable software program with a CPH staff member;

To enable the child to share the same software program with his/her parents during a parental visit at the CPH; and

To share the program with his/her parents during a hospital pass visit at home.

Activities: Orientation and Planning

Several orientation sessions were held throughout the hospital to introduce the project and the project teacher. The orientation sessions helped the project teacher learn the hospital network and gave the project team (project teacher, principal, and the teacher/curriculum coordinator) an opportunity to explain the project and to respond to questions. Additionally, these sessions generated support and enthusiasm for the project from the other staff members of the CPH.

The project team held planning sessions to develop the project time line, strategies for implementation, and management tools. Three computer inservice workshops were held for teachers, child care workers, and the allied therapies staff. Topics presented in the workshop sessions included a review of computer hardware and software operation, an introduction to new software and hardware, and additional ways to integrate the use of the computer into the daily curriculum activities.

Additional training sessions to meet the individual needs of the CPH staff were provided on an ongoing basis throughout the project's operation. Training topics included word processing, desk top publishing, graphics, data base management, software selection for content area integration, and problem solving techniques. Most of the training sessions were designed to provide staff members with advanced skills in using and teaching computer technology.

Hardware and Software Purchases

Two Apple computers and peripherals were purchased. These, with the four Apple computers already available, were used to fulfill the goals of the project. This provided each classroom with its own computer. One of the two new computers, an Apple 2e, was fully compatible with the existing hardware configuration. The other new system, an Apple 2gs, also was compatible, but had graphics and audio capabilities which have wide-spread applications across several curricula areas. Additionally, an Image-

writer II printer was purchased. This printer can be used with color ribbons and support a wide range of fonts and print qualities. Because Apple computers are in widespread use in school districts throughout New Mexico and there is an enormous range of software applications available for elementary and middle school programs, these computers were particularly well suited for the Mimbres school students.

Software choices were based not only on the special needs of the children at the CPH, but on the likelihood of their availability in the schools to which the children would return after their hospital treatment. Special emphasis was placed upon selecting software that not only was appropriate for students to share with adults, but that supported classroom instructional programs. Further, software was selected that was appealing, fun, easy to use, and did not have "homework" overtones. Simulations and multi use graphic programs were preferred to drill and practice or tutorial software. Oregon Trail (MECC), Paintworks Plus, and the Carmen Sandiego series are examples of the software that were most successful.

Operational Design

The project teacher and the teacher/curriculum coordinator developed an informal process for selecting the children and the hospital staff adults as the learning teams, selecting software packages that would be appropriate to use, and planning the sequence of activities.

At a Mimbres School staff meeting the teacher/curriculum coordinator explained the process and sequence for implementing the project activities and emphasized the key role that the classroom teacher played in finding the appropriate time for a child to start in the project. The classroom teacher's involvement was vital in facilitating the child's successful integration of computer skill activities within the classroom program.

Although nearly all the children at the CPH participated in the project, some worked only with CPH adults while others worked with CPH adults and then their parents. The extent of each child's participation in this project depended upon his/her progress in the overall hospital treatment program and the classroom staff's own skill and comfort level with performing computing activities.

The classroom teacher and the project teacher coordinated the logistics of the adult-child learning team activities.

The Mimbres principal supported the project by:

modeling the use of computer technology in the daily activities of the school;

making computer training available for all staff during their work time;

providing adequate software programs and hardware for accessibility;

providing opportunities for the staff to apply their new skills; and

rewarding the staff for their accomplishments.

The project team recognized, from the project's inception, that all the participants would not learn the same things. The project teacher helped all participants to determine their entry level skill and interest level. Individual programs were developed to enable those who were beginners feel success as well as those who were ready to proceed to advanced program applications. Those new to computer technology were encouraged to use the tutorial programs available in the Mimbres library and to use a word processing program to gain experience through drill and practice tasks of their own choosing. Staff members were encouraged to take advantage of the numerous opportunities at all entry levels to learn this technology. Staff members were encouraged to make suggestions throughout the project's operation that would better enable the goals of the project to be met. Ideas and suggestions were well received and gave everyone a sense of ownership for the project. Regardless of their level of computer skills, the classroom teachers were the key link between the project team and the children. The teachers decided when a child was ready to participate in the project and discussed this with the child's therapist and the cottage staff. When the staff was in agreement that the child was ready to participate, the classroom teacher and the project teacher established a starting date and the project moved forward. This team work among the various staff members in the hospital was an essential factor in maintaining widespread support and cooperation for the project. Appropriate and timely inservice training was very important to the staff members gaining a sense of security and comfort with a new technology. Tasks that were useful such as sign and banner making, word processing, and simple problem-solving games were well received.

The introduction of a new program, on an already extensive curriculum had the potential to elicit negative responses from the staff. To avoid this pitfall, careful attention was given to the

selection of software programs that would integrate easily with other curricula objectives. Another important feature was the pacing of the introduction and the application of the computer technology. The project team monitored this regularly and made adjustments as needed.

Learning Team Activities

Child and Project Teacher Team: Following the selection of the teaching/learning team (child, CPH adult), the classroom teacher and project teacher met with the cottage staff to develop a schedule for the child to work with the project teacher. A time for the project teacher and each child participating in the project to get acquainted was included in this schedule. At this meeting the child was told about the project and asked if s/he would like to participate. All the children were enthusiastic and gave a positive response to this inquiry. Once the project was visibly in progress, children would stop the project teacher when they would see her on the hospital grounds and ask when it would be their turn to participate.

The project teacher conducted a series of informal individual sessions with each child. In these sessions fundamentals of computer use were reviewed and the child was introduced to the software package that was to be used for the project. All of these sessions were held after school hours, in the early evenings, or on weekends.

As the sessions progressed, topics included teaching techniques with special attention to the needs of the computer phobic adult. One strategy employed by the project teacher, to teach the children how to teach adults, was role playing the adult learner. In this role, the project teacher inserted the diskettes into the drive incorrectly, failed to understand the game strategy, and needed help finding special function keys on the computer keyboard. The child then practiced ways to help the adult learner feel successful, including the use of praise and ways of giving help without making the adult feel incompetent. It was stressed, with the children, that reasonable care should be taken of the computer, but if a malfunction occurred it should be assumed that it was not the fault of the members of the teaching/learning team.

Some children jotted down a few notes to assist themselves in their teaching role. Although the original project design included plans for the project teacher to write a simple handbook of directions for the child to use as a reference source, this turned out to be an unnecessary task. All of the software runs automatically after inserting the diskette in the drive and pow-

ering up the computer. After that, all directions appear on the computer monitor. In addition, many children (and some of the parents) were not comfortable reading manuals. Generally, the children internalized the process so well from "hands on" practice that they shared the software programs with their adult learners without needing outside help.

Each session with the project teacher and the child was followed by an informal conference with the cottage staff and the classroom teacher to evaluate the child's progress. Sometimes the project teacher discovered some additional academic needs of the child and shared this information with the classroom teacher.

The cottage staff was always interested in knowing how the teaching/learning sessions were progressing. They were able to provide continuing encouragement and moral support to the children.

Child and CPH Adult Team: Following two or three project teacher-child sessions, the classroom teacher and the project teacher arranged for the child to work with a CPH adult.

In the first session, the child explained to the adult how to set the computer up, how to handle the software, how to insert the diskette and power up the system. The child introduced the software and showed the adult how to boot the program. The project teacher usually sat with the child and the adult learner, making it a three person team. This was routinely the case with the younger children. Usually the adult learner grasped, very quickly, what the child was doing and could help the child with the teaching/learning activities. Thus, the process of child-adult shared learning experience was occurring. The older children were sometimes self-conscious in the role of the teacher. Therefore, depending upon the confidence level of the child, the project teacher would work as a member of the three person team and at other times, the project teacher would work in a nearby room and be available, if needed. In this configuration, the child was able to call out to ask the project teacher for help with a particular problem when such occurred. The children were quite relaxed about asking for help, regardless of whether or not their parents or another adult was with them.

At the end of the adult-child session, the adult, the child, and the project teacher completed forms evaluating the session. As the project progressed, the project teacher and the teacher/curriculum coordinator decided to use a more open-ended evaluation format in order that the parents and the children could be spontaneous and less structured in their responses.

Child and Parent Team: When the classroom and project teachers decided a child was ready to work with his/her parents, the project teacher conferred with the cottage staff and the child's therapist. The therapist arranged the initial visit between the parent and the project teacher. Sometimes the therapist advised the project teacher to contact the parent directly. If the parent was interested in participating in the project, a schedule was arranged for the child and the parent, with the project teacher in attendance, to work together with the computer and the software program. The child implemented the strategies s/he had learned and shared the computer skills and the special piece of software with his/her parents. The same forms that were used in the sessions with the child and the CPH adult were completed at the end of each parent-child session. As with the CPH adults and children, the open-ended questions elicited more useful responses than the original check sheet format.

The final steps in this process were the parents and child taking the computer home during one or more of the child's passes from the hospital. The logistics for arranging for the computer to be taken home by the children and their parents were complex and very time consuming. Those who were able to take the computing system and the software programs home reported that the experience not only matched the goals of the project, but had some other important and unexpected benefits. These will be described in the OUTCOMES section of this report.

PHASE II

Objective: To train the CPH staff to perform the teacher facilitator role for developing and maintaining the child-CPH adult and the child-parent teaching/learning teams.

Activities:

The project teacher continued to provide the staff with the training to broaden their instructional and computing skills. Software selection for content area integration was a major instructional focus. Criteria for selecting software were:

content value,
format presentation,
effectiveness for small group instruction, and the
potential for enhancing interpersonal communication skills.

The project teacher provided "hot line" support to the classroom staff. She answered questions by phone, replied to notes left in her mail box, and/or worked in person with the staff.

When the project teacher was not available, the classroom teachers and child care workers continued to use the computer and the software in the time slots they set aside to work individually with their students. This served the dual purpose of providing opportunities for adult-child communication and further supporting the instructional program.

One classroom teacher selected Tom Snyder's DECISIONS! DECISIONS! a software program designed around television advertising ethics, as a springboard for introducing their human sexuality unit. The class was divided into teams comprised of a teacher or child care worker and two children. These teams debated the possible outcomes of various advertising strategies and decisions. The classroom staff believed that the decision-making techniques presented in this computer program provided a basis for an effective discussion about decisions and consequences regarding sexual behavior as presented in the human sexuality unit.

As allied therapists (e.g., speech therapist, art therapist) became interested in computer applications, classroom teachers arranged for project children to teach allied therapists to use selected software applications. The art therapist, for example enjoyed learning how to use PAINT WORKS PLUS.

OUTCOMES

Hospital-wide

Interest and participation of children, CPH staff, and parents remained at a high level through out the project's duration. The program was received enthusiastically as demonstrated by the number of the CPH staff who asked to be the adults with whom the children would share computer activities. The adult project participants were motivated to request advanced training in the use of computer technology. The project provided another dimension to communication among the CPH staff across all disciplines. The project was effectively integrated into the therapeutic treatment program and accepted as a routine activity for the children.

Classroom

Teachers made increased use of the computer as a tool to facilitate interest and participation in a wide range of learning activities. As the emphasis on the use of the computer as a tool to facilitate communication and the implementation of instructional objectives increased, the use of the computer solely as a behavioral reward decreased. Teachers, child care workers and

allied therapists became increasingly aware of the untapped potential of the computer technology available to them. As a result of the increased integration of this technology within the classrooms, teachers requested hardware and peripheral upgrades for the older equipment. Budget adjustments were made and by July all classrooms had printers with extended 80 column cards, monitors capable of displaying color or monochrome images, and two disk drives. Staff and children became proficient in evaluating software programs.

Additional objectives that reflected participation in this project were added to the Individual Educational Plan (IEP) for each child who participated.

Children

The children expressed their enthusiasm for the project through their pleasant and friendly interactions with the project teacher. Some of the younger children skipped back to their cottages after their computer session, others hugged the project teacher, and all asked for more time with the computer activities. The children were eager to share the software programs that they had learned with their peers as well as the classroom and cottage staff. The positive reactions of these children were especially significant because their emotional problems often included a profound lack of self-confidence and very poor interpersonal relationships.

Using the computer and the various software programs, the children improved their skills in basic academic areas, problem-solving and interpersonal communications. All of the software programs required the users to read and follow instructions sequentially. Some software programs focused on mathematics, some on history and geography. All required some aspect of problem-solving. Word processing was an important activity for the older children. Some of these children, with extremely poor self concepts, discovered that the computer gave them a sense of privacy. Using the computer as a tool for learning, they were able to explore concepts, practice skills, and make mistakes without embarrassment. They gained self confidence as they processed information and ideas from concrete to abstract conceptualizations.

An unanticipated positive outcome was the increased opportunity for the children to use oral expression. The children were quite verbal about their computer activities. They were self motivated to explain to others how a game was played or how to solve a problem. As the children became more proficient, they became more articulate in discussing what they were doing. They also

gained skills in interpersonal relationships as they developed some team work and in constructively debating strategies in problem solving.

Parents, Children and Home Passes with the Computer

The parents who participated in the project were very enthusiastic about the opportunity to do something with their children which was new, nonthreatening and fun for everyone. The families who took the computer home reported that they had fun and positive interactions with each other as they worked together on the computer activities. The parents and the children felt secure when they took the computer home because they could call the project teacher for help if they needed it. The project teacher was able to visit (within the Albuquerque area) the family at home to assist with problem solving if necessary. Parents and children did call to ask for assistance from the project teacher. In all instances, she was able to respond and the home activities were successfully completed.

Parents were reassured that they would not be responsible for repair or replacement of the computer or software if either or both were damaged accidentally while these items were in their home. No equipment or software was damaged during the project's implementation.

The logistics involved in arranging for the parent-child computer sessions and arranging for the computer to go home were complex and subject to last minute changes. The fact that the project teacher was available only part-time made the task of arranging these schedules even more cumbersome. Coordinating the schedules of all the people involved was one of the most time consuming tasks for implementing this project.

Another significant factor that affected the project's progress was the children's serious mental health problems. Many children successfully participated in the project's first phase which involved working directly with the project teacher and the CPH staff person who was to be the adult learner. Fewer children participated in the second phase which involved working with their parents as the learners and still fewer participated in the third phase in which they would take the computer home. This was in part due to the fact that many children were wards of the state and that the parent child relationships were tenuous or non existent. Although the children, parents, and staff were enthusiastic and eager to participate there were enormous scheduling problems. It was difficult to find times when the parents came to the hospital when the cottage staff or the therapists didn't

have essential treatment activities scheduled. Sometimes computer training sessions were scheduled and the parents would have a last minute change of plans and not visit the hospital at the scheduled time. On some occasions, the parents would plan to take the children on an outing before going home on a pass. This would make taking the computer home because it could not be concealed easily in the vehicle while the family went on the outing.

One child, who dreaded going on a home pass because family tensions were so difficult, was able to face the visit more easily when he knew that he would be able to take the computer home. The computer and the software program that the child selected served as a catalyst in fostering positive interactions between himself and his parents.

One parent who owned a computer, but not an Apple, bought the same software program in a format that would function on her home computer so that she and her daughter could continue to share computer learning experiences together.

In another case, a parent remained resistent to working at the computer with her son. It was hoped that this parent would take the opportunity to work with her son in the hospital environment that was supportive to both of them. However, the parent's pattern of remaining disengaged in her child's treatment program carried over to the computer project as well.

NETWORKING

The CPH Mimbres School staff developed a computer networking system with several Albuquerque Public Schools personnel using a telecommunications application program. Information about new software programs, computer hardware, instructional materials and strategies and other resources continue to be exchanged through this technology.

CONCLUSIONS

In spite of the delay in starting the project and the reorganization of the implementation plan, the project did demonstrate that the computer technology learned by the seriously emotionally disturbed children at the Mimbres School could be used to facilitate positive communication with their parents. This process also supported the psychotherapeutic treatment program which in part focused upon establishing positive relationships between the child and his/her parents. Evidence to support this conclusion came from a collection of spontaneous comments from those who participated in the project, from interviews conducted by the

project teacher with the project participants and the notations of progress recorded in the children's IEPs.

The CPH staff found the project teacher to be an excellent resource in providing information about new software programs and computer hardware. The project teacher also brought new ideas which enhanced the Mimbres curricula.

As the children became more comfortable with using computer technology, they became willing to be peer tutors. This was an important learning experience which helped support the children's development of positive self worth.

It is unlikely that a more intensive implementation of this computer project will occur without a full time project teacher who would also serve as the overall project manager. The present organization of the responsibilities of the CPH staff and the configuration of their schedules preclude their taking on additional responsibilities for continuing this computer project as it is currently designed. At present, the CPH is not able to increase the number of permanent positions assigned to operate and maintain the treatment program. Therefore, consideration will be given to restructuring some assignments of the present Mimbres School staff to incorporate the adult/child teaching learning team concept into the ongoing therapeutic educational program. The operational budget for the CPH Mimbres School is able to support the upgrading of the existing computer hardware, adding of peripherals, acquisition of new software applications for use within the overall curriculum and to provide continuing inservice computer training for the staff.

REPLICATING THE PROJECT

All who were involved in this child/adult teaching/learning team computer project believe that this project be replicated for the purpose of conducting formal research as to the effectiveness of this approach to facilitating positive child/parent communication.

Most important to the successful replication of this project is the full support of the principal, the teachers, and the clinical staff. A reasonably well established computer technology program upon which to introduce the child/adult teaching/learning team concept also is a prerequisite.

A full time teacher coordinator should provide the primary leadership for the implementation of the project. The selection of a project teacher is a critical factor, also. Important characteristics essential for the project teacher coordinator to be

successful are:

to have superior communication skills;

to have a well organized, low key teaching and managerial style;

to have an ability to be flexible and spontaneous in adjusting the program to effectively meet the needs of the participants;

to be computer literate with many program applications;

to have an abundance of patience; and

to have excellent problem-solving skills.

The project teacher coordinator must become an integral member of the school staff in order to effectively implement this type of project. A full time project teacher coordinator would make it possible to manage, with greater ease, the logistics of schedules and communication among all the project participants. Rapid response to questions and problems encounter by the children, their parents, and the staff is essential. New learners to computer technology often become "panicky" if they do not have the someone who is computer literate available immediately when they have problems with either the hardware or software programs.

The project teacher coordinator must be able to work with those who are resistant and well as those who are enthusiastic about learning a new technology. An important task is to help the participants overcome their fear of failure. The project teacher coordinator should be familiar with current trends, literature, the state of the art in hardware, peripherals, and software uses in an instructional setting such as a school. The project teacher coordinator should be part of a network of colleagues with whom s/he can share ideas as well as to give or seek advice. In summation, the project teacher coordinator should be both a master teacher and an administrative facilitator.

APPENDIXES

Appendix A

Demographic Data

SUMMARY STATISTICS

DECEMBER 1988

TABLE C

INPATIENT ADMISSIONS BY SEX, ETHNICITY AND TYPE OF ADMISSION

	December	Fiscal Year-to-Date	%
SEX:			
Female	1	20	40.82
Male	1	29	59.18
Totals	2	49	100.00
ETHNICITY:			
Spanish/Chicano	1	16	32.65
Other Hispanic-American	-	-	-
Black/Afro-American	1	2	4.08
Indian/Native-American	-	3	6.12
Caucasian/All Other White	-	28	57.14
Other (includes Oriental)	-	-	-
Totals	2	49	100.00
ADMISSION TYPE:			
Emergency	1	15	30.61
Urgent (scheduled)	1	34	69.39
Totals	2	49	100.00
Readmits (Recidivism Rate)	-	3	6.12

Appendix B

Project Teacher Résumé

BETSY JANSSEN
4237 Broadmoor N.E.
Albuquerque, NM 87108
(505)268-1654 (Home)
(505)883-9743 (Work)

EMPLOYMENT:

1982-Present — THE UNIVERSITY OF NEW MEXICO
Instructor, Continuing Education/Curriculum, Instruction, Multicultural Teacher Educ.
Course: Computing for Teachers

1983-Present — ALBUQUERQUE PUBLIC SCHOOLS
Computer Education Resource Teacher
Primary Responsibilities: Development, Coordination for Staff Computer Training;
Secondary Curriculum Development and Implementation

1978-1983 — ALBUQUERQUE PUBLIC SCHOOLS
Computer Technology, Career Enrichment Center
Enriched Middle School Summer Programs
Primary Responsibilites: Teacher, Computing and Data Processing;
District Computer Education Program planning and development committees

1975-1978 — ALBUQUERQUE PUBLIC SCHOOLS
Van Buren Middle School (Van Buren Junior High)
Primary Responsiblities: Teacher of Mathematics, Grades 6-9;
District Curriculm Development Plan; Mathematics Curriculum Planning Committes

1969-1973 — Short Term Positions - List available on request

1969 (Spring) — MT. DIABLO UNIFIED SCHOOL DISTRICT
Pleasant Hill High School, Concord, California
Long Term Substitute Teacher, Dance and Physical Education

1967-1968 — MERRITT COLLEGE, Oakland, California
Instructor, Dance and Physical Education

1961-1966 — BERKELEY UNIFIED SCHOOL DISTRICT
Berkeley High School, Berkeley, California
Teacher of Dance and Physical Education, English, Grades 10-12
Choreographer for Theatre Arts Department

EDUCATION:

1957-1961 — MILLS COLLEGE, Oakland, CA
B.A., 1961, Dance

1961-1962 — UNIVERSITY OF CALIFORNIA, Berkeley, California
Graduate Internship Program in Teacher Education

1984 (Spring) — UNIVERSITY OF SOUTHERN FLORIDA, Tampa, Florida
IBM Model Schools Workshops

1974-Present — UNIVERSITY OF NEW MEXICO, Albuquerque, New Mexico
Coursework in Mathematics; Computer Science; Curriculum, Instruction, and Multicultural Teacher Ed (CIMTE); Tech. and Voc. Education (Interactive Video)
Enrolled in CIMTE Master of Arts Program, Completion: May 1988

CERTIFICATES: New Mexico and California (Lifetime) Secondary Teacher Certificates
Will complete work for New Mexico Five Year Administrative Certificate in June, 1988

ASSOCIATIONS: President, New Mexico Council of Computer Users in Education, 1987-88
Council of Teachers of Mathematics - national, state, and local organizations
Association for Computing Machinery (ACM), Rio Grande Chapter
ACM Special Interest Group Business and Data Processing, Albuquerque
New Mexico Network for Women in Science and Engineering

PRESENTATIONS: Arizona Conference Computer Use in Education, March, 1983
New Mexico Conference Computer Users in Education, March 1983, 1984, 1985, 1986
Chair, New Mexico Conference of Computer Users in Education, 1987
New Mexico Conference of the Council of Teachers of Mathematics, January, 1984
National Institute for Multicultural Education, November, 1985
National Conference of the Teachers of Mathematics, January, 1986

COMMUNITY: Albuquerque Chair, Expanding Your Horizons (part of nation-wide series of conferences to promote the participation of young women in science and mathematics)
Parent Committees, Duke City Soccer Club
Articulation Committee, Albuq. Public Schools-Albuq.Technical.-Vocational Institute

SOFTWARE: Utilities: Word Processors, Data Base Managers, Spread Sheets, General Ledgers
Programming Languages: BASIC, Logo, COBOL, Algol-W

REFERENCES: Rudy Miller, Coordinator of Computer Education
Albuquerque Public Schools
3315 Louisiana Blvd, N.E.
Albuquerque, NM 87110

Paul Resta, Special Assistant for Educational Computing to the Superintendent
Albuquerque Public Schools
Albuquerque, NM 87106

Appendix C

Examples of Items Purchased with Grant Funds

Approved _____

Date _____

THE NEW MEXICO CHILDREN'S PSYCHIATRIC CENTER

EDUCATION DEPARTMENT

PURCHASE REQUISITION WORKSHEET

Request submitted by Jude Smith Date 2/28/87

TITY	DESCRIPTION	UNIT PRICE	EXTENSION
1	Apple IIe Composite Monitor (uni disk Controller Cable	$ 960.00	
1	Apple IIGS RGB Monitor 3.5" drive 5.25 drive	$ 1405.00	
1	Image Writer Printer Cable Sub Serial Interface	$ 630.00	
1	Joystick	34.99	
	Installing Dealer: Rocky Mtn. Computer 2109 Wyoming ALBQ, NM. 87112		
	S.P.D # T20855		

Approved _____

Date 4/22/87

THE NEW MEXICO CHILDREN'S PSYCHIATRIC CENTER

EDUCATION DEPARTMENT

PURCHASE REQUISITION WORKSHEET

: submitted by Judy Smith Date April 20, 1987

QTY	DESCRIPTION	UNIT PRICE	EXTENSION
	Carmen Sandiego Set	69.95	
	(Shipping)	3.50	
	Broderbund Software - Direct		
	P.O. Box 12947		
	San Rafael, Cal.		
	94913-2947		
	tel #. (415) 479-1185		

(renewed)

Judy,
There is a 30 day free trial on this. I will send in the card. Then if you decide you don't want it you can return. Otherwise we'll pay in 30 days or bill is billed.

Appendix D

Example of a Time Line

Grant Progress Report and Next Steps
Written by Betsy but reflecting discussion and planning with Judy, too.

First Steps: Laying the Groundword

Meetings to explain project and enlist staff support have been held with
- Medical Staff
- Coordinators
- Teachers

In Service computer refresh and review workshops have been done with
- child care workers (day long)
- teachers (two separate two hour sessions)

Individual help sessions with teachers

Planning Sessions: Betsy and Judy
- to design evaluation check sheets
- to plan for hardware and software acquisition
- to plan for staff integration and support

These sessions have created a broad base of support from the teaching, cottage, and medical staff. We want to take adavantage of this momentum and enthusiasm and involve as broad a base of the staff as we can for the next part of the project.

Part II: Getting started with the children, their Learners, their parents

Guidelines for Selecting Children:
- Children should be scheduled for CPH through late summer,
- Children should be involved with their parents in an ongoing therapeutic relationship,
- Children should possess appropriate social and communication skills which will make it likely that they will succeed in teaching an adult.

Timelines, responsibilities (who talks to whom), and logistics

May 8-15:

Judy and the teachers will select one child from each classroom. Judy and the teachers will select an adult for the child to teach.
- The teacher will approach the adult and make sure that that adult concurs with the plan.
- The teacher will talk to the medical staff and will choose an appropriate way to approach the parent.
- Betsy will arrange with the cottage staff for a schedule to start working with the first children, and will start with the first child.

May 15-22

The first child (possibly children) will start teaching their adult.
The other children will start working with Betsy.

May 22-29

The first child will be scheduled for a session with his/her parent.
The other children will be somewhere in the work-with-Betsy-or-

with-their-adult cycle.

Judy and Betsy will plan for the next round of four children.

Judy and the teachers will make decisions and begin the steps to initiate the next round of student-adults-parents.

May 29-June5
The first child will schedule another parent session. If it seems appropriate to Betsy and Judy, the next session may be the culminating take-the-computer-home session.

Second, third and fourth children may be ready to schedule a first parent session.

Appendix E

Strategies for Implementation

Choose Kid - Classroom Teacher

Clear/Alert Cottage Staff - Classroom teacher

Select software for the Kid - Betsy and Classroom Teacher

Teach Kid to use software - Teacher - Childcare Workers
After child gets hang of software and moment to work with family approaches, important to include strategies for child to use with family. Sharing, dealing with sibs, etc.

Arr for Kid to work with family at CPH - Teacher
Because this is reach out, Clinician MUST be involved; Cottage staff usually knows when family therapy is, knows when child is going next on leave etc.

Kid works with parent at cph. Betsy
usually takes 30 - 40 minutes. Involves getting computer out and putting computer and software back the way it was found! Parents, child, facilitator complete report on session.

Arrange for child and family to take computer home. Betsy
Bundle computer up. Deliver to Cottage. make sure it arranged so that family knows how to plug everything in. Come back and put it away when child returns. Family has Betsy's home phone and they do call. Some home visits are necessary. Sometimes it necessary to remain at the home for several hours.
97

****
Consultant Services - one hour per week on site, phone calls to APS

Group Inservices
Software Preview (show and tell)
Single software tutorials (hands-on for participants)
Technical context for software (i.e. printing files from different software programs on different printers, cpus)

Inservices incorporate developing a level of comfort with hardware and software and include teaching strategies.

Technical Advisement
Hardware and software troubleshooting

******
Things to think about
Training primaries
Software itself
Logistics of checking equipment out

Who is contact person at CPH for troubleshooting when computer is at home?

Should the component of taking computer home be eliminated or can we sort out the logistics of getting computer to and from cottage?

How does staff keep up? Find out what's new and worthy?

How do we schedule on going computer inservice?

****

Who needs to be involved in planning strategies for transition from grant to regular program?

Judy - Curriculum Coordinator

Betsy and Judy with teachers and Dan Hogan and program managers talk about absorption into regular program

Appendix F

Examples of Assessment Tools

UNIVERSITY OF NEW MEXICO CHILDREN'S PSYCHIATRIC HOSPITAL

MIMBRES SCHOOL

Teaching Teams to Enhance Microcomputer Comrnunication
Between School and Family

PARENTS AND CHILDREN TOGETHER - PACT

Teacher/Learner Checklist

NAME: _____

DATE: _____

Please check yes or no.

YES	NO	
____	____	This was fun.
____	____	This was hard work.
____	____	This was easy.
____	____	I would like to do this again.
____	____	I think the person I worked with had a good time.
____	____	I learned something new.
____	____	The person I worked with learned something new.
____	____	My partner and I worked well together.
____	____	I would like to use the same program again.
____	____	I would like to try a new program.

PLEASE CHOOSE ONE:

If you were the teacher, how did you feel about teaching?

Great ___ Good ____ Fair ____

If you were the learner, how did you feel about learning?

Great ___ Good ____ Fair ____ BJ 8-87

UNIVERSITY OF NEW MEXICO CHILDREN'S PSYCHIATRIC HOSPITAL
MIMBRES SCHOOL

Teaching Teams to Enhance Microcomputer Communication
Between School and Family

PARENTS AND CHILDREN TOGETHER - PACT

Facilitator Checklist

Young Person: _____ Learner: _____

Date: _____ Facilitator: _____

Language Skills:

Computer vocabulary ____

Fluency with computer language ____

Spontaneity ____

Relates ideas logically ____

Problem Solving Skills:

Successful program startup ____

Coped with equipment and software ____

Experimented with software ____

Stayed on task ____

Completed task ____

Felt successful at end ____

Interpersonal Skills:

Gave/received criticism well ____

Cooperated ____

Showed sensitivity to partner ____

Showed self confidence ____

Coped with learning/teaching problems ____

Please number each observation 1, 2, or 3, using the following rating scale: 1 - weak, 2 - adequate, 3 - strong.

Appendix G

Inservice Workshop Schedules

CHILDREN'S PSYCHIATRIC HOSPITAL
MIMBRES SCHOOL

COMPUTING WORKSHOP
MARCH 18, 1987
3:00 - 5:00

OVERVIEW
- This Afternoon
  - Philosophy
  - Whatis/Betcha
  - Data Base
- Other Times
  - Individual Help - Review, Learn, Practice
    - Initializing Disks, Copying Files/Disks
    - Word Processing
    - ???
  - Group Sessions
    - Graphics
    - Problem Solving Software
    - ????

PHILOSOPHY
- A little about me
- Computer as empowering tool
- Process
- Multi-step activities

WHATIS/BETCHA
- Public Domain
- Problem Solving
- Pattern Recognition (Math??)
- How could you use this in your classroom?

PFS:file
- Classroom Collections
- Design
- Add
- Search/Update
- Print
- What are some units you think might be enhanced by using PFS?

Summary

CHILDREN'S PSYCHIATRIC HOSPITAL

CHILD CARE WORKERS

COMPUTING INSERVICE

APRIL 13, 1987
APS/ERR
8:00 - 3:30

8:00 - 8:30 COFFEE

8:30 - 10:00 INTRODUCTIONS AND OVERVIEW

PRINTSHOP AND PICTURES

10:00 - 11:30 SOFTWARE PREVIEW

11:30 - 1:30 LUNCH

1:30 - 3:30 DATA BASES

CHILDREN'S PSYCHIATRIC HOSPITAL

EDUCATION
COMPUTING INSERVICE
APRIL 22, 1987

REVIEW PFS:file
- Jeannie's project
- Questions?

PRINTING LOGO GRAPHICS

MECC SOFTWARE SAMPLE

DOS TOPICS:
- COPYING **DISKS** WITH COPYA
- COPYING **FILES** WITH FID

APPLEWRITER

Anything else? Is this a good order?

Appendix H

Examples of "Help" Sheets

HOW TO PLAY WHATIS/BETCHA

These Instructions assume that you have a copy of the program WHATIS/BETCHA on an initialized disk. Remember that you will need a color monitor for this game.

Insert your disk that has WHATIS/BETCHA in disk drive 1, and boot the disk. At the prompt, a square bracket, type 'RUN WHATIS/BETCHA'. (Do not type the single quote marks.)

A matrix appears on the screen. One of the squares will be highlighted and you have to guess what color that square is. To guess a color, use the following keys: R=red, W=white, G=green, Y=yellow, B=blue, and P-purple. If you guess the correct color, move to another square and repeat the process. To move to another square, use the J,I,K, and M keys. They form a diamond on the right hand side of the keyboard, and if you look at their relationship, you see that I is up, J is left, M is down, and K is right. (Historical note: this is the way the cursor was moved before the Apples had cursor arrow keys).

The object of the game is to try to guess what color pattern is hidden within the matrix. If you need some help, you have the option of moving the highlighter to a particular square and pressing the return key, and the computer will show you that square's color. The computer also keeps track of your score.

WHATIS/BETCHA is a piece of public domain software that was given to APS by EQUALS from the Lawrence Hall of Science at the University of California, Berkeley, CA. EQUALS works to promote equity in technology for women and other groups who may need extra encouragement to consider there career fields.

WHATIS/BETCHA helps build pattern recognition skills.

Appendix I

Examples of Written Communications

May 30, 1987

To: CPH Education Staff
From: Betsy

Topics: MECC Software, June Schedule, and Feedback

The MECC 1986-1987 software catalog is in my mailbox. UNM has a license to copy MECC software, and APS has the software. If you would like to order any of the MECC software in the catalog, please let me know by leaving me a blank disk for each piece you would like me to copy for you.

Please put a label on the disk and print on it the name of the MECC software you want, and at the bottom of the label print the letters CPH. Please do this for each disk you wish copied.

Don't agonize over particiular titles. If you wish to preview first, we can make that arrangement. If you order a disk and it is inappropriate for your needs (or those of anyone else at CPH), simply copy something else over the disk or use it for data.

APS is NOT renewing its IBM license in 87-88, so any of those pieces you may wish will not be available after July when we return our copy disk to MECC.

I plan to be at CPH Monday and Tuesday afternoons, June 1 and 2, Thursday June 4 from 5-7, and June 5 from 3-5.
Beginning the week of June 8, I will usually be at CPH from 2-5, Monday-Thursday. Please continue to leave me notes when you need to see me.

I would appreciate your telling me anything you think would be interesting or useful for me to know about the computer project, such as comments the children make to you or your observations about behavior or attitude that you think are related to the project. It feels *wonderful* to me, but I would appreciate your sharing your perceptions. Thanks so much.

UNIVERSITY OF NEW MEXICO CHILDREN'S PSYCHIATRIC HOSPITAL

MIMBRES SCHOOL

Teaching Teams to Enhance Microcomputer Communication Between School and Family

PARENTS AND CHILDREN TOGETHER - PACT

To: Teachers, Allied Therapists, Coordinators, Clinicians, CCWs
From: Betsy Janssen, PACT
Date: November 18, 1987

Topic: PACT (Federal Grant) Update

Since the purchase of the software and new Apple 2gs computer in late Spring, twelve of our children have participated in the PACT project. The twelve represent two groups of six children. All of the cottages have had children participate in the project. All children have taught (or are teaching) an adult. Two of the twelve have met all of the goals of the program: teaching another adult to use the software, teaching his/her parent(s), and finally, taking the computer home on pass to share with the family. Four children were discharged earlier than expected and so did not complete the full program. One child's parent elected to buy the software and other family oriented programs for the IBM compatible computer at home rather than take the CPH computer home. Three children will probably take a computer home on one of their next passes, and for two children it became inappropriate to take the computer home.

The intent of the project, you remember, was to have a positive effect on parent-child relationships. One father summed up our hopes for the program on his evaluation form: "This was fun! It allowed my wife and I to participate with our son in a fun activity. Having this game at home will allow the family to participate in something fun together." This parent's response is typical of the feedback.

However, I also have noted some unanticipated and positive side effects. Two of the pieces of software tutor and drill geography and social studies facts. The children using this software have developed some good organizational and reference skills in addition to learning history and characteristics of several nations and states. The game format helped make the experience fun.

Additionally, children have taught each other or worked as a team with an adult and another child. The development of individual and group problem solving strategies is an unanticipated and welcome by product of the project.

I am getting ready to begin our third round of children. As with the other groups, the software selection, (a drawing program, basketball game, geography game, writing program, etc.) will be based on what the classroom teacher thinks will work out best for the child and his or her parent(s).

The project has been extended through February. It is my hope that we will be able to serve a fourth round of children before the grant's conclusion.

Thank you so much for all your help and your unending patience with interrupted routines. It has been helpful for me to talk with you about the children in the project and get your ideas about what a particular child needs or what will smooth the way with a parent. I hope you will keep on sharing your ideas and perceptions of what is working well, as well as what can help make the project run more smoothly for you.

xc: V. Cavalluzzo
C. Gunn
D. Hogan
P. Harris
B. Hendren
S. Van Horen

UNIVERSITY OF NEW MEXICO CHILDREN'S PSYCHIATRIC HOSPITAL
MIMBRES SCHOOL

Teaching Teams to Enhance Microcomputer Communication Between School and Family
Parents ans Children Together - PACT

Dear Parent(s),

The C.P.H. Mimbres School has received a federal grant for our Students. Because of this grant we are able to provide students and their parents the opportunity to use a computer together. The students will learn how to use a computer program and will then teach their parents. We hope that while your child is enrolled in Mimbres School you will take advantage of this opportunity. If you would like to participate or would like to learn more about the grant , please check the appropriate box:

----- yes ----- no
----- -----

If you would like to participate, the school staff will contact you.

Sincerely yours,

COMPUTER GRANT IDEAS

I. Begin with Print Shop
   A. This is an easy program to use
   B. Children love the immediate response of printouts
   C. This program is menu driven and will be easy for children to teach to adults
   D. Children make letterheads to write letters home - individualized by picture
   E. Make letterheads at home for family members

II. Use Print Shop Companion
   A. Make weekly and monthly calendars for themselves and make a copy for family
   B. At home, have family make calendars of their activities so child will know what their family is doing, important dates should be included on this
   C. Using Print Shop/Print Shop Companion/Libraries children can choose to make and then teach their parents:
      1. Greeting cards
      2. Posters to hang in their rooms
      3. Make special occasion banners or Cottage banners

III. Games
   A. Introduce games that can be played as a group
   B. Depending on age and functional level of student some suggestions are:
      1. Chivalry
      2. Millionwaire
      3. Concentration
      4. Dragon's Keep
      5. Picadilly
      6. Puzzle Tanks

IV. Educational Games
A. With teachers determine students areas of strength and weakness
B. Use computer programs to reinforce areas where student will meet with success
C. Use programs where students need reinforcement, drill and practice, tutorials
D. Match student's interests with programs - ie. dinosaurs, reading, science, sports, etc.
E. Create word searches and crossword puzzles for classmates

V. Word Processing/Data Base
A. Bank Street Writer
1. Work on development of workbook
2. Students can do simple work assignments using BSW
3. Using letterheads created with Print Shop - write letters
B. Bank Street Filer
1. Make telephone directory
2. Make address file

VI. Games
A. Find out what type of games student likes
B. Use games to reinforce and reward work

TEACHER SURVEY

1. How would you like to see the computer being used

2. What do you see as my role?

3. How can I best serve you and the children?

4. Aside from the project, is there any way I can be of assistance to you - ie. software, ideas, etc.?

5. Do you have any particular students you would like to be in the initial phase of the project? If so, please answer the following questions:

1. Student's name

2. Age

3. Computer experience

4. Academic strengths

5. Academic weaknesses

6. Student's interests

7. Problem's I may encounter

8. Anything else!!!

Certificate of

COMPLETION
PACT COMPUTER PROJECT

WHERE IN THE USA IS....
GREG SAULIS?

Betsy Janssen

NOVEMBER 3, 1987